AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended)   A method of remote metering the consumption of utilities distributed through a public distribution network to a plurality of consumers, each consumer being associated with at least one remote meter, wherein:

- each ~~of the plurality of~~ remote ~~meters~~ meter measures a consumption and reports the measured consumption over a power line of an electricity distribution network to a concentrator associated with ~~said~~ a plurality of remote meters,; ~~and~~

- said concentrator communicates over one or more power lines of the electricity distribution network with said plurality of remote meters in order to collect consumption data and perform tasks related to the administration of its associated remote meters;

- each of said remote meters ~~having~~ has a host controller and a program memory, said host controller executing programs stored in said program memory,;

~~wherein~~ - said concentrator ~~performs the operation of transmitting~~ transmits program data including information defining a sequence of program instructions to at least one of said plurality of remote meters over the one or more power lines of the electricity distribution network;

~~wherein at least one~~ - each of plural ones of said remote meters: ~~performs the operation of~~

_____ - ~~receiving~~ receives said program data,; and

_____ - ~~updating~~ updates at least a portion of said programs stored in said program memory in accordance with the received program data; ~~and~~

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wherein - said operation of transmitting said program data comprises

successively transmitting program data messages each comprising a portion of said program

data; and

- said concentrator:

- successively queries over the one or more power lines of the electricity

distribution network each of said plural meters whether it has received the successively

transmitted program data messages comprising different portions of said program data; and

- if a queried meter reports one or more missing or incorrectly received

program data messages, retransmits in a broadcast mode the one or more program data messages

reported by the queried meter to be incorrect or missing; and

- each of said plural meters receives those one or more program data

messages during said retransmission which the respective meter has missed or incorrectly

received.

2. (currently amended)   The method according to claim 1, wherein said operation

performed by said concentrator of transmitting program data comprises: the steps of

- selecting at least one individual meter or group of meters among said plurality of

remote meters by transmitting at least one selection message addressed to said at least one

individual meter or group of meters;

- wherein each of said remote meters performs said operation of receiving said

program data and updating said program memory subject to the condition that it has been

selected by said concentrator.

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3. (currently amended)   The method according to claim 1, wherein

-    said ~~operation of~~ transmitting program data comprises ~~the step of~~ transmitting a program update control message; and

-    said ~~operation of~~ updating said program stored in said program memory in accordance with the received program data is performed in accordance with said received program update control message.

4. (original)   The method according to claim 3, wherein said program update control message comprises control information relating to the update time and/or a program digest and/or a download start command.

5. (previously presented)   The method according to claim 1, wherein each transmitted program data message contains a message identifier which distinguishes the message from other program data messages.

6. (currently amended)   The method according to claim 5, wherein:

-    the concentrator transmits to said at least one remote meter a message indicating a number N of program data messages;

wherein the ~~operation of~~ receiving said program data comprises: ~~the steps of~~

-    checking whether all the N program data messages have been received successfully; and

- if all the N program data messages have been received successfully, arranging the program data content of said N messages in accordance with the respective identifiers n of each message and/or calculating a program digest from the received program data messages.

7. Canceled.

8. (currently amended)   The method according to claim ~~7~~1, further comprising:

- said concentrator repeating said ~~operation of successively~~ successive querying of each of said ~~at least one~~ plural meters until all of said ~~at least one~~ plural meters have reported ~~the~~ successful reception of all program data messages into which the program data are divided, or until an abort condition is satisfied.

9. (previously presented)   The method according to claim 8, comprising

- if a meter has successfully received all of said program data messages, reporting a download complete message to said concentrator;

- said concentrator excluding from said successive queries such meters from which a download complete message has been received.

10. (original) The method according to claim 9, wherein said download complete message is reported in response to a said query by said concentrator.

11. (currently amended)   The method according to claim 1, wherein said ~~step of~~ receiving program data comprises storing said program data in a buffer memory.

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12. (previously presented)   The method according to claim 11, wherein said buffer memory is a non volatile memory.

13. (currently amended)   The method according to claim 11, wherein the ~~operation of~~ updating said program stored in said program memory comprises:

-    checking whether the program data stored in said buffer memory are correct;

-    if the program data in said buffer memory are correct, copying the program data stored in said buffer memory into said program memory;

-    checking whether the copied data in said program memory are correct; and

-    if the copied data are found to be not correct, ~~repeating the step of~~ again copying the program data stored in said buffer memory into said program memory.

14. (currently amended)   The method according to claim 11, wherein said ~~operation of~~ updating at least a portion of said programs stored in said program memory is performed by said host controller executing a program data swap routine stored in a non volatile memory area protected against any program data change.

15. (currently amended)   The method according to claim 13, comprising:

-    setting a flag prior to copying data from said buffer memory into said program memory; and

-    clearing said flag if the copied data in said program memory are found to be correct.

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16. (currently amended)   The method according to claim 13, wherein said host controller:

-    checks said flag after a power failure; and

-    if said flag is found to be set, restarts the ~~operation of~~ copying of data from said buffer memory into said program memory and checking the correctness of the copied data.

17. Canceled.

18. (previously presented)   The method according to claim 1, wherein said utilities are electricity, water or gas.

19. (currently amended)   A system for remote metering the consumption of utilities distributed through a public distribution network to a plurality of consumers, the system , comprising:

at least one concentrator and a plurality of remote meters located inside or outside of customer premises,

said at least one concentrator being adapted to communicate with said remote meters in order to collect consumption data and perform tasks related to the administration of its associated remote meters;

each of said remote meters having a host controller and a program memory for executing programs stored in said program memory; and

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said concentrator and said remote meters being adapted to perform a method of remote

metering in accordance with claim 1.

20. (currently amended) A concentrator for collecting data regarding the

consumption of utilities from a plurality of associated remote meters each having a host

controller and a program memory for storing a program to be executed by said host controller of

the remote meter, said concentrator comprising:

- a communication interface for communicating with said plurality of remote

meters over one or more power lines of an electricity distribution network;

- a micro controller for processing data received from said remote meters through

said communication interface;

- said micro controller being programmed to transmit program data including

information defining a sequence of program instructions to at least one of said associated remote

meters for updating at least a portion of said programs stored in the program memory of said

remote meter over one or more power lines of the electricity distribution network;

wherein said concentrator is adapted arranged to:

- transmit said program data by successively transmitting program data

messages each comprising a portion of said program data over one or more power lines of the

electricity distribution network,

- successively query over the one or more power lines of the electricity

distribution network each of said plurality of meters whether it has received the successively

transmitted program data messages comprising different portions of said program data; and

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-        if a queried meter reports one or more missing or incorrectly received program data messages, retransmit in a broadcast mode the one or more program data messages reported by the queried meter to be incorrect or missing so that each of said plurality of meters receives those one or more program data messages during said retransmission which the respective meter has missed or incorrectly received.

21. (currently amended)   A remote meter for measuring the consumption of utilities, comprising:

-        a communication interface for transmitting data concerning the measured consumption of utilities to a concentrator over one or more power lines of an electricity distribution network;

-        a host controller and a program memory, said host controller being arranged to execute programs stored in said program memory relating to the measuring of the consumption of said utilities and the administration of the remote meter;

-        wherein said remote meter is ~~adapted~~ arranged to:

-        receive program data including information defining a sequence of program instructions transmitted in the form of program data messages each comprising a portion of the program data from said concentrator over one or more power lines of the electricity distribution network through said communication interface, ~~and to~~

-        update at least a portion of said programs stored in said program memory in accordance with said received program data;

-        receive a query over the one or more power lines of the electricity distribution network from the concentrator whether the remote meter has received the

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successively transmitted program data messages comprising different portions of said program

data:

- send a report to the concentrator when one or more of the program data

messages is missing or incorrectly received; and

- receive a broadcast from the concentrator one or more program data

messages reported by the remote meter or at least one other report meter to be incorrect or

missing.

22. (new)   The concentrator according to claim 20 further arranged to repeat said

successive querying of each of said plural meters until all of said plural meters have reported

successful reception of all program data messages into which the program data are divided, or

until an abort condition is satisfied.

23. (new)   The concentrator according to claim 22, further arranged to exclude from

said successive queries a meter from which a download complete message has been received.

24. (new)   The remote meter according to claim 21, further arranged to report a

download complete message to the concentrator if the remote meter has successfully received all

of said program data messages.